



PCT/GB 2003 / 0 0 0 7 6 9



INVESTOR IN PEOPLE

## PRIORITY DOCUMENT

SUBMITTED OR TRANSMITTED IN  
COMPLIANCE WITH RULE 17.1(a) OR (b)

The Patent Office  
Concept House  
Cardiff Road  
Newport  
South Wales  
NP10 8QQ

REC'D 20 MAR 2003

WIPO

PCT

I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

In accordance with the rules, the words "public limited company" may be replaced by p.l.c., plc, P.L.C. or PLC.

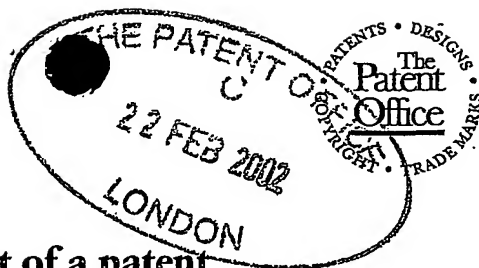
Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.

Signed

Dated

7 March 2003

BEST AVAILABLE COPY



25FEB02 E698292-1 D00022  
P01/7700 0.00-0204189.5

## Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office

Cardiff Road  
Newport  
South Wales  
NP10 8QQ

1. Your reference  
NIS/DC/37288

2. Patent application number  
(The Patent Office will fill in this part)

**0204189.5** | **22 FEB 2002**

3. Full name, address and postcode of the or of each applicant (underline all surnames)

611574005 Molins PLC  
11 Tanners Drive  
Blakelands  
Milton Keynes  
Bucks MK14 5LU

Patents ADP number (if you know it)

If the applicant is a corporate body, give the country/state of its incorporation

GB

4. Title of the invention  
Infusion Package.

5. Name of your agent (if you have one)  
fJ Cleveland

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

40-43 Chancery Lane  
London WC2A 1JQ

Patents ADP number (if you know it) 07368855001 ✓

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number	Country	Priority application number (if you know it)	Date of filing (day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application	Number of earlier application	Date of filing (day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

a) any applicant named in part 3 is not an inventor, or

b) there is an inventor who is not named as an applicant, or

c) any named applicant is a corporate body.


See note (d))

Yes

**Patents Form 1/77**

9. Enter the number of sheets for any of the following items you are filing with this form.  
Do not count copies of the same document

Continuation sheets of this form

Description	5
Claim(s)	2
Abstract	-
Drawing(s)	2 

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (*Patents Form 7/77*)

Request for preliminary examination and search (*Patents Form 9/77*)

Request for substantive examination (*Patents Form 10/77*)

Any other documents  
(please specify)

11. I/We request the grant of a patent on the basis of this application.

FJ Cleveland  
Signature



Date  
22 February 2002

12. Name and daytime telephone number of person to contact in the United Kingdom

N I Smith 020 7405 5875

**Warning**

*After an application for a patent has been filed, the Comptroller of the Patent Office will consider whether publication or communication of the invention should be prohibited or restricted under Section 22 of the Patents Act 1977. You will be informed if it is necessary to prohibit or restrict your invention in this way. Furthermore, if you live in the United Kingdom, Section 23 of the Patents Act 1977 stops you from applying for a patent abroad without first getting written permission from the Patent Office unless an application has been filed at least 6 weeks beforehand in the United Kingdom for a patent for the same invention and either no direction prohibiting publication or communication has been given, or any such direction has been revoked.*

**Notes**

- If you need help to fill in this form or you have any questions, please contact the Patent Office on 08459 500505.
- Write your answers in capital letters using black ink or you may type them.
- If there is not enough space for all the relevant details on any part of this form, please continue on a separate sheet of paper and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.
- If you have answered 'Yes' Patents Form 7/77 will need to be filed.
- Once you have filled in the form you must remember to sign and date it.
- For details of the fee and ways to pay please contact the Patent Office.

**Infusion Package**

This invention relates to infusion packages and particularly, but not exclusively to infusion packages for coffee.

5           Convention infusion packages for tea or coffee comprise a porous walled container into which has been charged the coffee or tea. In use such containers are immersed in hot liquid such as water. It is known to suspend an open container such as a bag in the liquid and this has been achieved using a hanging string. In other arrangements a filter bag is provided with holding  
10       members which enable the filter to be supported from the rim of a container for the hot liquid. One such arrangement is described in E-A-0463181, but this arrangement can be difficult to use and manufacture. An infusion package which is simpler to manufacture is described in WO 01/51383, but it has been found particularly with coffee that such an arrangement does not produce a  
15       satisfactory flavour in an acceptable time.

          According to the present invention there is provided an infusion package comprising a semi-porous open container for an infusible material and a support for supporting the container from the rim of a vessel, said support being capable of defining an opening through which liquid can be poured into  
20       the container, said container comprising opposite side walls and divider means which divides the container into two compartments such that infusible material

in one compartment is separated from that in the other compartment by said divider means.

The divider means may comprise a gusset formed between the side walls. The gusset may be formed integrally with the side walls.

5       The support may comprise a pair of juxtaposed members which are sealed at opposite ends. The sealing of the two members may be by means of a heat seal.

10       The upper end portion of the container may be sandwiched between the juxtaposed members of the support and sealed thereto by a heat seal. The support means may be foldable so that it can lie alongside the container to act as a closure which closes the open container until it is ready for use.

The invention will be described now by way of example only with particular reference to the accompanying drawings. In the drawings:

15       Figure 1 is a perspective view of an infusion package for coffee according to one embodiment of the present invention;

Figure 2 is a cross-sectional view of the infusion package;

Figure 3 is a schematic plan view of the infusion package in use, and

Figure 4 is a perspective view illustrating how the container is divided into two compartments.

20       Referring to the drawings an infusion package (10) comprises a container (12) and a support (14) for the container. The support comprises two

support members (14) by means of which the container can be mounted on a ring of a drinking vessel such as a mug or cup (15) as shown in Figure 3 of the drawings.

5 The support elements can each comprise of a strip of plastics coated board which are disposed opposite one another. Each support member is notched at one of its ends (16) to define a projection (18). The projection (18) lies in the plane of the support member and projects in the lengthwise direction of the member perpendicular to the ends (16).

10 At the end of the support members opposite the ends (16) there is a recess (22). The recesses (22) are aligned with and correspond in shape to the respective projections (18).

The support members are sealed to one another and to the container (12). These seals can be heat seals. The arrangement of the support members is such that the end (16) of one member is disposed opposite the end (20) of the other member so that the respective projections project in opposite directions. Each support member has a score line (24) disposed substantially midway between the ends (16) and extending perpendicular to the lengthwise direction of the member and parallel to the end (16, 20). The score lines enable the support members to be moved from a closed position (Figure 2) to an open position as shown in Figure 3 of the drawings.

15  
20

The container is in the form of an open ended sack or bag (12). The

bag is formed from a web of porous heat sealable material which is folded to produce a cross section which is generally W-shaped as shown in Figures 2 and 4, the central part of the W forming a deep gusset. The long sides (30) of the W are sealed to each other by edge seals (32) which extend from the upper  
5 to the lower end of the bag. The lower corners are rounded as shown at (35) in order to minimise drippage of liquid from the bag.

It will be seen from Figure 2 of the drawings that the central gusset (34) forms a divider means which divides the bag or container into two compartments (36, 38). Coffee in each of these compartments is separated by  
10 the central gusset. It has been found that this type of arrangement creates a coffee drink of enhanced flavour in an acceptable time.

The upper open end of the bag (12) is sandwiched between the support members (14). The external surfaces of the bag at the open end are secured to the opposed inwardly facing surface of the support members in such a manner  
15 that the bag can be left open at the upper end as shown in Figure 3. The support members are sealed to one another at their ends (16, 20) by heat seals which extend parallel to the score lines (24).

It will be appreciated that the support member (14) can be folded over so that it is disposed alongside the upper end of the bag (12). This has the  
20 advantage that the size of any sachet containing the infusion package is reduced and the open end of the bag is effectively closed so that the coffee will

not spill out in transit.

In use the bag is removed from a sachet in which it has been stored and the support members are folded upwardly to bring the infusion package into the condition shown in Figure 1. A compressive force is applied to the opposite  
5 ends of the support member causing the members to bow outwardly in the region of the score lines (24). As shown in Figure 3 the result is that the support members adopt a diamond configuration allowing the projections (18) to sit on the rim of a drinking vessel (15). In addition the bowing of the support members opens the upper end of the bag and provides an opening  
10 through which water can be poured onto the coffee contained in the two compartments (36, 38) of the bag.

It will also be appreciated that the design allows the bag to be supported from the rim of the vessel so that the coffee containing portion sits in the liquid in the vessel once the water has been poured into the bag.

15 The support members (14) can be formed by the method described in WO 01/51383, but their formation is not in any way restricted to this method.



## Claims

1. An infusion package comprising a semi-porous open container for an infusible material and a support for supporting the container from the rim of a vessel, said support being capable of defining an opening through which liquid can be poured into the container, said container comprising opposite side walls and divider means which divides the container into two compartments such that infusible material in one compartment is separated from that in the other compartment by said divider means.
2. An infusion package according to claim 1, wherein the divider means comprises a gusset formed between the side walls.
3. An infusion package according to claim 2, wherein the gusset is formed integrally with the side walls.
4. An infusion package according to any preceding claim, wherein the support comprises a pair of juxtaposed members which are sealed an opposite ends.
5. An infusion package according to claim 4, wherein the sealing of the

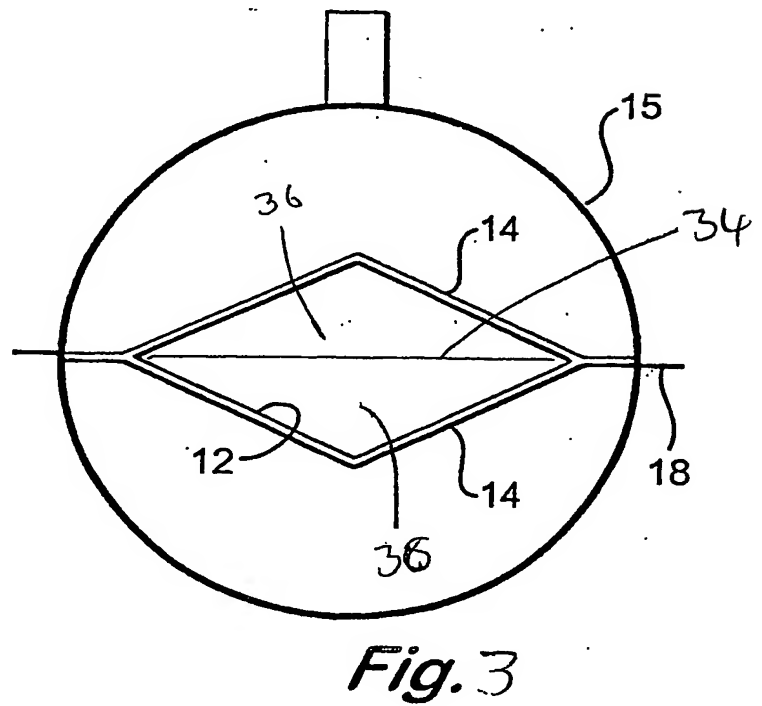
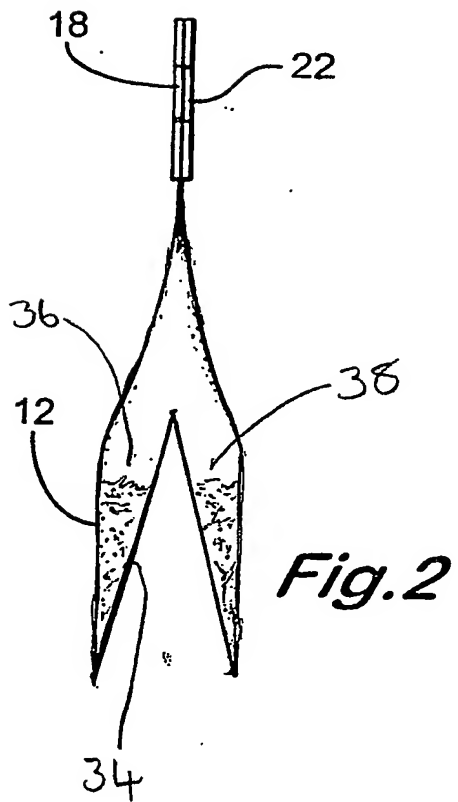
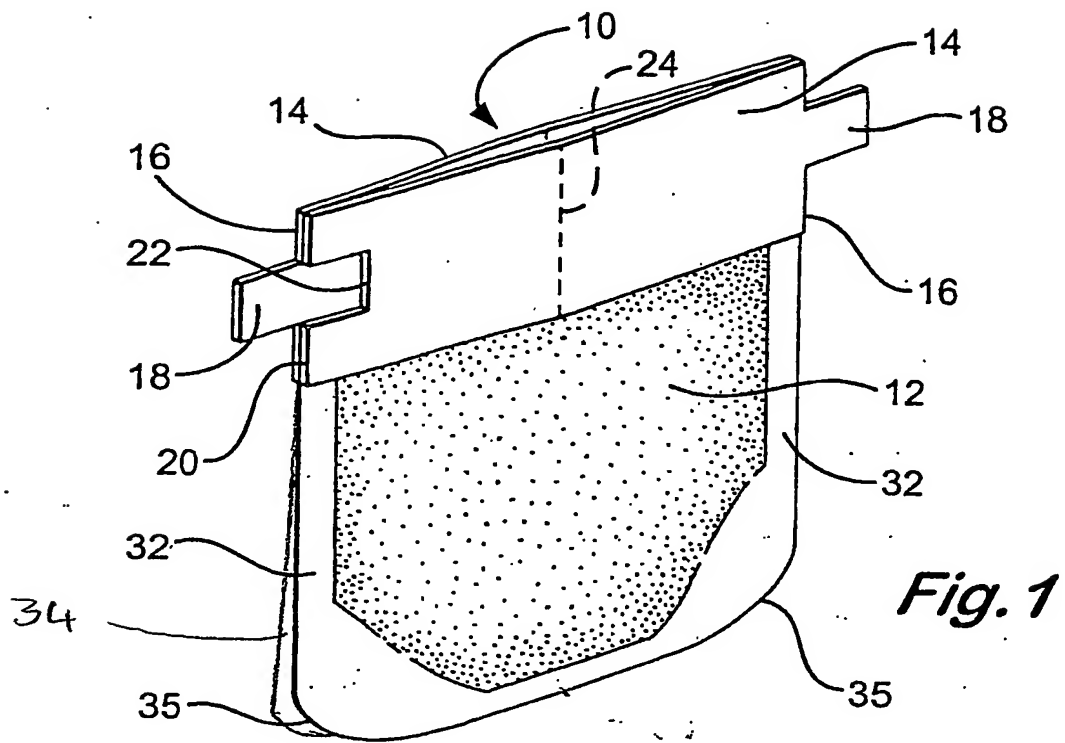
two members is by means of a heat seal.

6. An infusion package according to claim 4 or claim 5, wherein the upper end portion of the container is sandwiched between the juxtaposed members of the support and sealed thereto by a heat seal.

7. An infusion package according to any preceding claim, wherein the support means is foldable so that it can lie alongside the container to act as a closure which closes the open container until it is ready for use.

10

8. An infusion package substantially as hereinbefore described with reference to and as shown in the accompanying drawings.



2/2

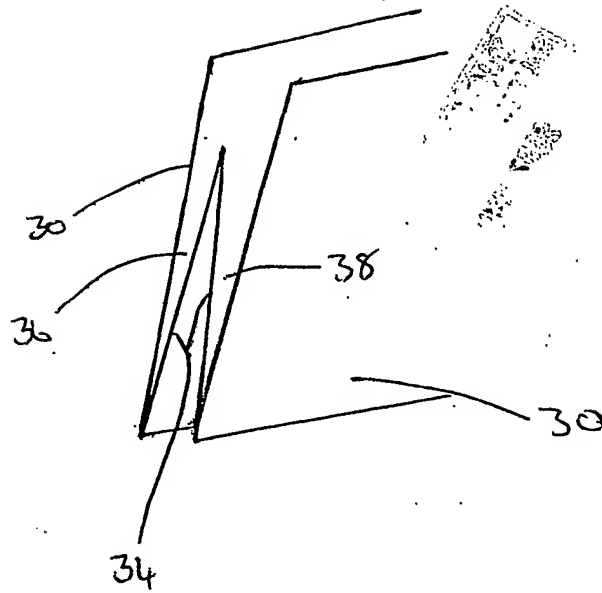


FIG 4

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☒ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY:**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**